

Relative Lateral Motion in Linear CMP

Abstract of the Disclosure

[035] Apparatus and methods are disclosed that promote greater polishing uniformity in linear CMP systems by introducing a relative lateral motion between a CMP belt and a rotating polish head securing a wafer. A belt polish module comprises a linear CMP belt forming a loop around an idle roller and a drive roller, first and second pistons engaging, respectively, first and second ends of the idle roller, and a controller configured to vary the forces applied by the first and second pistons to the ends of the idle roller in order to laterally translate the linear CMP belt. A method for linear CMP comprises rotating a wafer about a vertical axis, contacting the rotating wafer against a linear CMP belt moving in a longitudinal direction, and causing a relative lateral motion between the rotating wafer and the linear CMP belt.